

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000603**Date Inspected:** 09-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** n/a**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Charpy Vee Notch Testing/ Plate Material**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Sherri Brannon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

**Charpy Vee Notch Testing:**

QA Inspector Brannon randomly observed ZPMC impact testing of Charpy Vee Notch Test (CVN) specimens for rolled shapes. Also, observing (CVN) testing were ZPMC Quality Assurance Mr. Xu Jun and Fu Jun and ABF representative Mr. Kevin Carpenter. Specimen numbers are as follows:

**Twenty Eight (28) Charpy Vee Notch (CVN) Test Specimens**

Specimen number H17-1, H17-2, heat number 110843 - W-21x57, ASTM A709 G50/A6, 10x10x55.

Specimen number H18, heat number 110844 - W-21x57, ASTM A709 G50/A6, 10x10x55.

Specimen number H21-1, H21-2, H21-3, heat number 110910 - W-21x57, ASTM A709, 10x10x55.

Specimen number H22-1, H22-2, H22-3, heat number 110911 - W-21x57, ASTM A709, 10x10x55.

Specimen number H23-1, H23-2, H23-3, heat number 110912 - W-21x57, ASTM A709, 10x10x55.

Specimen number H25-1, H25-2, heat number 110914 - W-21x57, ASTM A709, 10x10x55.

Specimen number H26-1, H26-2, heat number 110834 - W-18x46, W-21x57, ASTM A709, 10x10x55.

Specimen number H30, heat number 110838 - W-21x57, ASTM A709 G50/A6, 10x10x55.

Specimen number H31, heat number 110839 - W-21x57, ASTM A709 G50/A6, 10x10x55.

Specimen number H32-1, H32-2, H32-3, heat number 110841 - W-21x57, ASTM A709, 10x10x55.

Specimen number H35-1, H35-2, heat number 110829 - W-18x46, ASTM A709, 10x10x55.

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Specimen number H36-1, H36-2, H36-3, heat number 110842 - W-18x46, W-21x57, ASTM A709, 10x10x55.

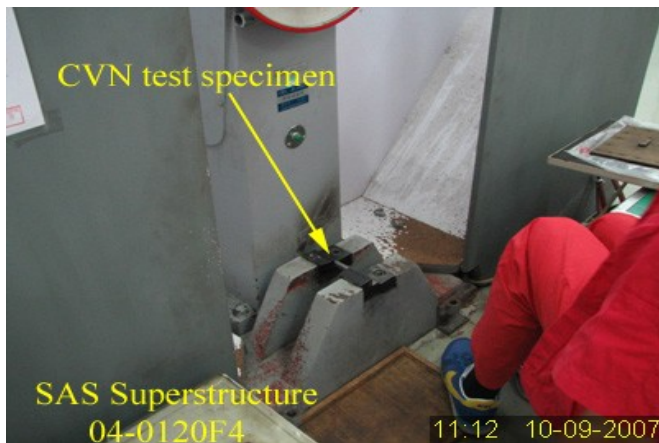
Specimen number H37, heat number 110845 - W-18x46, ASTM A709 G50/A6, 10x10x55.

Specimen number H39, heat number 110847 - W-18x46, ASTM A709 G50/A6, 10x10x55.

The specimens identified above have been tested at 4 degrees Celsius and were observed and recorded by ZPMC laboratory personnel as having impact energy values at or above 20 Joules (J). Note: 1- ABF Mr. Kevin Carpenter stated that rolled wide flange beams have not been released to Caltrans and that the impact testing is extra testing that American Bridge/Fluor Enterprises, a JV (ABF) wanted to administer. Also, See ZPMC Additional CVN Test Report for Shapes for more detail information dated October 9, 2007.

### Plate Material Storage Yard:

Quality Assurance (QA) Inspector Brannon received plate material list for batch #21, production plate list No. 1672, 1694~1811 received from American Bridge/Fluor (ABF). QA Inspector Brannon went to the ZPMC material storage yard accompanied by ZPMC Quality Assurance Mr. Shen Xue Jun. QA Inspector Brannon observed a total of 7 out of 119 plates for batch #21. The plates were observed for their general condition and markings. Plate material thicknesses range from 12mm to 20mm. The plates were designated as A709M-345T2, A709M-345T2-X, A709M-345F2-X and A709M-345T2-X-S. Plate material list for batch #21 was accompanied with material test reports (MTR's). The MTR's could not be reviewed on this date and will be reviewed at the earliest opportunity. QA Inspector Brannon assigned lot number B22-044-07 to the 7 plates observed on this date.



### Summary of Conversations:

No relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Brannon, Sherri

Quality Assurance Inspector

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**Reviewed By:** Cuellar,Robert

QA Reviewer